



State of Washington
Report of Examination
for Water Right Change

WR File NR: CS4-02398CTCL@2
WR Doc ID: 4237149

PRIORITY DATE	WATER RIGHT NUMBER
June 30, 1870	Ecology Control Number: CS4-02398CTCL@2 Certificate Number: S4-85046-J

MAILING ADDRESS	SITE ADDRESS (IF DIFFERENT)
James Ives 14871 Rutherford Rd Yakima, WA 98903	n/a

Total Quantity Authorized for Withdrawal or Diversion		
WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
0.10	CFS	17.2

Limitation of Use:

When water is available in excess of that needed to satisfy all confirmed water rights both on and off the Yakama Reservation and any water needed to satisfy the Yakama Nation's minimum instream flow right for fish and other aquatic life, an additional 0.10 cfs, 5.94 acre-feet per year can be diverted.

Purpose						
PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Irrigation	0.10		CFS	17.2		04/15 – 07/10

REMARKS

The subject right is the primary source for irrigation.

IRRIGATED ACRES			PUBLIC WATER SYSTEM INFORMATION	
ADDITIVE	NON-ADDITIVE		WATER SYSTEM ID	CONNECTIONS
10.0			n/a	n/a

Source Location			
COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
YAKIMA	HATTON CREEK	AHTANUM CREEK	37-Yakima

SOURCE FACILITY/DEVICE	PARCEL	WELL TAG	TWN	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Surface diversion (S1)	171208-44002	n/a	12N	17E	8	SE SE	46°32'13"N	120°42'54"W

Datum: NAD83/WGS84

Place of Use (See Attachment 1)**PARCELS (NOT LISTED FOR SERVICE AREAS)**

171208-44002

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

W½SE¼SE¼ of Section 8, T. 12 N., R. 17 E.W.M.

Proposed Works

The water supply system consists of a surface water diversion with a 10 horsepower (hp) electric motor on a centrifugal pump through a 4-inch mainline and is distributed to the applicant's lands by means of a wheel-line sprinkler system.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Begun	Completed	Completed

Provisions

Ecology's findings as documented by this water right change decision are based on the Schedule of Water Rights presented in the Conditional Final Order, Subbasin No. 23, issued April 15, 2009 by the Yakima County Superior Court, and the current Acquavella Draft Schedule of Rights, which is periodically updated when changes are made by the Court. Ecology's decision is subject to any subsequent determination made by the Court, including the Final Decree in *Department of Ecology v. Acquavella*. Any changes to this water right made by the Court will be reflected on the final certificate of adjudicated water right, which will issue subsequent to entry of the Final Decree in *Department of Ecology v. Acquavella*.

Limitation of Use

When water is available in excess of that needed to satisfy all confirmed water rights both on and off the Yakama Reservation and any water needed to satisfy the Yakama Nation's minimum instream flow right for fish and other aquatic life, an additional 0.10 cfs, 5.94 acre-feet per year can be diverted.

Water Availability and Non-impairment

This appropriation may only initiate a call on junior rights when the quantity of water available at the confirmed POD is sufficient to exercise the right.

Measurements, Monitoring, Metering and Reporting

An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173.

WAC 173-173 describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Regional Office for forms to submit your water use data.

Measurement of Water Use

How often must water use be measured?	Record the maximum rate of diversion: Biweekly .
How often must water use data be reported to Ecology?	Annually (By January 31 of the following year).
What volume should be reported?	Total annual volume in acre-feet.
What rate should be reported?	Annual peak rate of withdrawal in gpm.

Department of Fish and Wildlife Requirement(s)

The intake(s) must be screened in accordance with Department of Fish and Wildlife screening criteria (pursuant to RCW 77.57.010, RCW 77.57.070, and RCW 77.57.040). If you have questions about screening criteria, contact the Department of Fish and Wildlife at:

Department of Fish and Wildlife	Phone: (360) 902-2534
Attention: Habitat Program	Email: habitatprogram@dfw.wa.gov
600 Capitol Way N	Website:
Olympia, WA 98501-1091	http://wdfw.wa.gov/conservation/habitat/planning/screening/

For the Yakima Construction Shop, to obtain technical assistance for your project (509) 575-2104.

Easement and Right-of-Way

Where the water source and/or water transmission facilities are not wholly located upon land owned by the applicant, issuance of a water right change authorization by this department does not convey a right of access to, or other right to use, land which the applicant does not legally possess. Obtaining such a right is a private matter between applicant and owner of that land.

Schedule and Inspections

Department of Ecology personnel, upon presentation of proper credentials, will have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

Findings of Facts

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I find the change of water right as recommended will not be detrimental to existing rights or the public welfare.

Therefore, I ORDER the requested change in the point of diversion under Change Application No. CS4-02398CTCL@2, subject to existing rights and the provisions specified above.

Your Right To Appeal

This Decision may be appealed pursuant to RCW 34.05.514(3), RCW 90.03.210(2), and Pretrial Order No. 12 entered in *State of Washington, Department of Ecology v. James Acquavella, et al.*, Yakima County Superior Court No. 77-2-01484-5 (the general adjudication of surface water rights in the Yakima River Basin). The person to whom this Decision is issued, if he or she wishes to file an appeal, must file the notice of appeal with the Yakima County Superior Court **within thirty (30) days of receipt of this Decision**. Appeals must be filed with the Superior Court Clerk's Office, Yakima County Superior Court, 128 North 2nd Street, Yakima WA 98901, RE: Yakima River Adjudication. Appeals must be served in

accordance with Pretrial Order No. 12, Section III ("Appeals Procedures"). The content of the notice of appeal must conform to RCW 34.05.546. Specifically, the notice of appeal must include:

- The name and mailing address of the appellant;
- Name and address of the appellant's attorney, if any;
- The name and address of the Department of Ecology;
- The specific application number of the decision being appealed;
- A copy of the decision;
- A brief explanation of Ecology's decision;
- Identification of persons who were parties in any adjudicative proceedings that led to Ecology's decision;
- Facts that demonstrate the appellant is entitled to obtain judicial review;
- The appellant's reasons for believing that relief should be granted; and
- A request for relief, specifying the type and extent of relief requested.

The "parties of record" who must be served with copies of the notice of appeal under RCW 34.05.542(3) are limited to the applicant of the decision subject to appeal, Ecology and the Office of the Attorney General.

All others receiving notice of this Decision, who wish to file an appeal, must file the appeal with the Yakima County Superior Court within **thirty (30) days of the date the Order was mailed**. The appeal must be filed in the same manner as described above.

Please send a copy of your appeal to:

Ms. Sage Park
Water Resources Program
Ecology Central Regional Office
15 West Yakima Ave, Ste 200
Yakima, WA 98902

Signed at Yakima, Washington, this _____ day of _____, 2015.

Sage Park, Section Manager
Water Resources Program/CRO

To find laws and agency rules visit the Washington State Legislature Website: <http://www1.leg.wa.gov/CodeReviser>.

If you need this document in a format for the visually impaired, call the Water Resources Program at 509-575-2490. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

INVESTIGATOR'S REPORT

Tyler Roberts, Department of Ecology
Water Right Control Number CS4-02398CTCL@2
Certificate No. S4-85046-J
Court Claim No. 02398

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application No. CS4-02398CTCL@2. On November 16, 2004, James C. Ives filed an application with the Washington State Department of Ecology to change the point of diversion under Court Claim No. 02398 in *The State of Washington, Department of Ecology v. James J. Acquavella, et. al.* The application was accepted and assigned control No. CS4-02398CTCL@2.

This change of point of diversion is being requested by the applicant and many other Subbasin 23 claimants because they are no longer using the PODs confirmed in the 1925 *Achepol Decree*. Thus, the Court requested that the claimants apply to Ecology to seek authorization to change their points of diversion from the point of diversion confirmed in the *Achepol Decree* to the location currently in use. The application and many others were submitted to Ecology to satisfy the request of the Court. WAC 173-152-050(2)(b) allows Ecology to prioritize applications ahead of other competing applications.

EXISTING Water Right Attributes

Water Right Owner:	James C. Ives
Priority Date:	June 30, 1870
Place of Use	W½SE¼SE¼ of Section 8, T. 12 N., R. 17 E.W.M.

County	Waterbody	Tributary To	WRIA
Yakima	Hatton Creek	Ahtanum Creek	37 - Lower Yakima

Purpose	Rate	Unit	Ac-ft/yr	Begin Season	End Season
Irrigation of 10.0 acres	0.10	cfs	17.2	April 15	July 10

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
S1	171217-21001	n/a	12N	17E	17	NE NW	n/a	n/a

CFS = Cubic Feet per Second; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian; Datum in NAD83/WGS84.

Limitation of Use:

When water is available in excess of that needed to satisfy all confirmed water rights both on and off the Yakama Reservation and any water needed to satisfy the Yakama Nation's minimum instream flow right for fish and other aquatic life, an additional 0.10 cfs, 5.94 acre-feet per year can be diverted.

REQUESTED Water Right Attributes

Applicant Name:	James C. Ives
Date of Application:	November 16, 2004
Place of Use	W½SE¼SE¼ of Section 8, T. 12 N., R. 17 E.W.M.

County	Waterbody	Tributary To	WRIA
Yakima	Hatton Creek	Ahtanum Creek	37 - Lower Yakima

Purpose	Rate	Unit	Acre-feet/yr	Begin Season	End Season
Irrigation of 10.0 acres	0.10	cfs	17.2	April 15	July 10

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
S1	171208-44002	n/a	12N	17E	8	SE SE	46°32'13"N	120°42'54"W

CFS = Cubic Feet per Second; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian; Datum in NAD83/WGS84.

Limitation of Use:

When water is available in excess of that needed to satisfy all confirmed water rights both on and off the Yakama Reservation and any water needed to satisfy the Yakama Nation's minimum instream flow right for fish and other aquatic life, an additional 0.10 cfs, 5.94 acre-feet per year can be diverted.

Legal Requirements for Requested Change

The following is a list of requirements that must be met prior to authorizing the proposed change in point of diversion:

Public Notice

Public Notice of the application was given in the Yakima Herald-Republic on February 10th and 17th, 2006.

No protests were filed against this application.

Consultation with the Department of Fish and Wildlife

This application was presented to the Yakima River Basin water Transfer Working Group (WTWG) during monthly meetings from February 26, 2007 through October 1, 2007. The Department of Fish and Wildlife participates in the WTWG. Ecology received an April 16, 2007 letter from the Department of Fish and Wildlife stating that their primary concern is that each respective water right holder and land owner complies with rules and regulation for the installation of fish screening devices in the State of Washington.

State Environmental Policy Act (SEPA)

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions are met:

- It is a surface water right application for more than 1 cubic feet per second (cfs), unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cfs, so long as that irrigation project will not receive public subsidies.
- It is a groundwater right application for more than 2,250 gallons per minute (gpm).
- It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above.
- It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA).
- It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

Because this application does not meet any of these conditions, it is categorically exempt from SEPA and a threshold determination is not required.

Water Resources Statutes and Case Law

Chapter 90.03 RCW

RCW 90.03.360 requires metering of all water users within fish critical basins. The Yakima River has been designated a fish critical basin. RCW 77.55.320 (formerly RCW 77.16.220; RCW 77.55.040 (formerly RCW 75.20.040), RCW 77.55.070 (formerly RCW 75.20.061) require all diversions from surface waters of the state to be screened to protect fish.

RCW 90.03.380(1) provides that a water right that has been put to beneficial use may be changed. The Point-of-Diversion (POD), place-of-use, and purpose-of-use may be changed if it would not result in harm or injury to other water rights.

The Washington Supreme Court has held that the Department of Ecology (Ecology), when processing an application for change or transfer of water right is required to make a tentative determination of the extent and validity of the right. This is necessary to establish whether a water right is eligible for change (*R. D. Merrill Co. v. PCHB*, 137 Wn.2d 118, 969 P.2d 458 (1999); *Okanogan Wilderness League v. Town of Twisp*, 133 Wn.2d 769, 947 P.2d 732 (1997)). It is not within Ecology's authority to adjudicate or make a final determination of the extent and validity of any water right or claim to a water right, only the Superior Court has such authority.

INVESTIGATION

On November 16, 2004, James Ives filed an application with the Washington State Department of Ecology to change a point of diversion under Court Claim No. 02398 in *The State of Washington, Department of Ecology v. James J. Acquavella, et. al.* The application was accepted and assigned control No. CS4-02398CTCL@2. On January 13, 2015 the change application was assigned to Tyler Roberts. Prior to assignment of the application to Roberts, Ecology permit writers Candis Graff and Scott Turner conducted a site visit with George Marshall of the Ahtanum Irrigation District on July 3, 2006. Notes from the site visit indicate a visit to the new point of diversion, with GPS points for the requested POD

recorded as 46°32'13"N, 120°42'54"W. The new point of diversion was observed to consist of a centrifugal pump driven by a 10 h.p. electric motor. Inlet/outlet was 4-inch pvc pipe. Pasture was observed as the crop type in 2006. Additional field data and images of the POD (see Attachment 2) were collected by Mark Dunbar and Jacqui Metcalfe on October 22, 2014.

Information from the above-referenced field notes, along with other sources of information, provided the basis for this investigation. These other sources include:

- Documentation submitted with the change application.
- Yakima River Basin Adjudication documentation.
- Applicable RCW and WAC chapters.
- Ecology records.
- Aerial photographs.
- Ecology's Geographic Information System (GIS) data.

There have been no changes in ownership of the land and/or water rights since the date the application was filed in 2004, nor has the right been assigned or subject to a motion to substitute parties filed with the Court. The application is not related to any other change application on file.

The property is located within the Ahtanum Creek Subbasin No. 23, approximately 17 miles upstream from the confluence of Ahtanum Creek and the Yakima River. Decades of development in the subbasin have resulted in large tracts of property being divided, subdivided, and transferred to new ownership. The division of land into smaller parcels has made the use of private irrigation ditches impractical or impossible in most cases. With the advancement of technology and new materials available, land owners and irrigators have gradually changed their irrigation practices from gravity fed surface diversions and ditches to pumps located on the owner's property, and pressurized sprinkler systems. The change from gravity fed diversions to pressurized systems naturally resulted in a change in location of the point of diversion, which in many cases went undocumented.

The Conditional Final Order (CFO) described the confirmed points of diversion within the NE¼NW¼ of Section 17, Township 12 N., Range 17 E.W.M. The applicant proposes to change the authorized location of the point of diversion to its current, actual position, which is located SE¼SE¼ of Section 8, Township 12 N., Range 17 E.W.M. The new location is approximately 2600 feet downstream on Hatton Creek from the confirmed point of diversion.

The CFO confirms 0.10 cfs and 17.20 acre-feet per year for the irrigation of 10 acres with a June 30, 1870 priority date. The place of use lies within the W½SE¼SE¼ of Section 8, T. 12 N., R. 17 E.W.M. When water is available in excess of that needed to satisfy all confirmed water rights both on and off the Yakama Reservation and any water needed to satisfy the Yakama Nation's minimum instream flow right for fish and other aquatic life, an additional 0.10 cfs, 5.94 acre-feet per year can be diverted for irrigation of 10 acres described on this right.

The CFO includes a schedule of rights which describes the Court's findings for each surface water claim it confirmed within the Ahtanum Creek subbasin (Subbasin 23). Subsequent to its filing in 2009, the CFO was appealed. The CFO was remanded by the Washington Supreme Court to Yakima Superior Court in 2014.

Ecology is using the Court's schedule of rights for its analysis of potential detriment or injury to existing rights that could result from the proposed change of point of diversion. The schedule of rights is periodically updated when changes are made by the Court.

History of Water Use

Legal History

There is a long history of legal actions concerning water rights in the Ahtanum Creek drainage. Water right claimants can be divided into two major groups which have historically asserted the right to use water on Ahtanum Creek:

- Property owners on non-tribal land north of the creek (northside users).
- Property owners and the Yakama Nation on land south of the creek (southside users).

At least six legal proceedings have influenced the allocation of water rights on Ahtanum Creek:¹

1. 1855 Treaty with the Yakama Nation.
2. 1897 *Benton v. John Cox*.
3. 1908 “Code Agreement”.
4. 1925 *State of Washington v. Annie Wiley Achepohl et al.*
5. 1947 *United States v. Ahtanum Irrigation District*.
6. 1977 – Currently in progress; *State of Washington Department of Ecology v. James J. Acquavella, et al.*

State of Washington Department of Ecology v. James J. Acquavella, et al. (Acquavella)

The *Acquavella* adjudication began in 1977 and is still in progress at the time of this writing. *Acquavella* is an adjudication of all surface water rights and claims within the entire Yakima River drainage basin, which includes 31 subbasins. The Ahtanum Creek drainage basin is Subbasin No. 23. Ahtanum is the last of the 31 subbasin proceedings in need of completion before a final decree for *Acquavella* can be issued by the Superior Court.

Due to the complex legal history of the Ahtanum Subbasin No. 23, the court established four criteria that must be met when evaluating the validity of Ahtanum claims:

1. The claimant’s predecessor must have been a signatory to the *1908 Code Agreement*.
2. The claimant’s predecessor must have participated in the 1925 *Achepohl* proceeding and must have provided evidence of compliance with state law.
3. The claimant, or their predecessor, must have filed an answer in *Ahtanum II*.
4. The claimant, or their predecessor, must have shown that water was beneficially used on the property after 1964, when *United States v. Ahtanum Irrigation District Civil Cause No. 312* was finalized by the *Pope Decree*.

The court concluded that it needed to adhere to both the 1964 *Pope Decree* and the 1925 *Achepohl* proceeding. Keeping that in mind, when the court evaluated claims where *Achepohl* certificates authorized more irrigated acreage than found in the *Pope Decree*, the court awarded a junior water right for the difference, provided there was no evidence of abandonment or relinquishment. A junior right, in this case, had the same priority date as the senior portion of the right and, as stated in the Report Of the Court, “...can only be exercised when the flow in Ahtanum Creek exceeds 62.59 cubic feet per second and no uses, including potential storage, are being made of the excess by water right holders on the reservation.”

¹ History taken from *Report of the Court Concerning the Water Rights for the Subbasin 23 (Ahtanum Creek) Volume 48 – Part I*; “b. Legal History” pp. 36-39; Yakima County Superior Court Cause No. 77-2-01484-5; January 31, 2002.

During the *Acquavella* proceedings the legality of many of the current points of diversion was called into question. Many claimants were no longer using the points of diversion confirmed in *Achepohl*. In many cases landowners (or their predecessors) had switched from gravity-flow ditches to pumps placed directly into the creek on or adjacent to the property being irrigated. In many cases, the landowners (or their predecessors) had not fulfilled the legal requirements to change a point of diversion under RCW 90.03.380. Thus, the Court requested that the claimants apply to Ecology to seek authorization to change their points of diversion from the historic point to the location currently in use. This application and many others were submitted to Ecology to satisfy this request of the Court.

Ahtanum Creek Subbasin Description

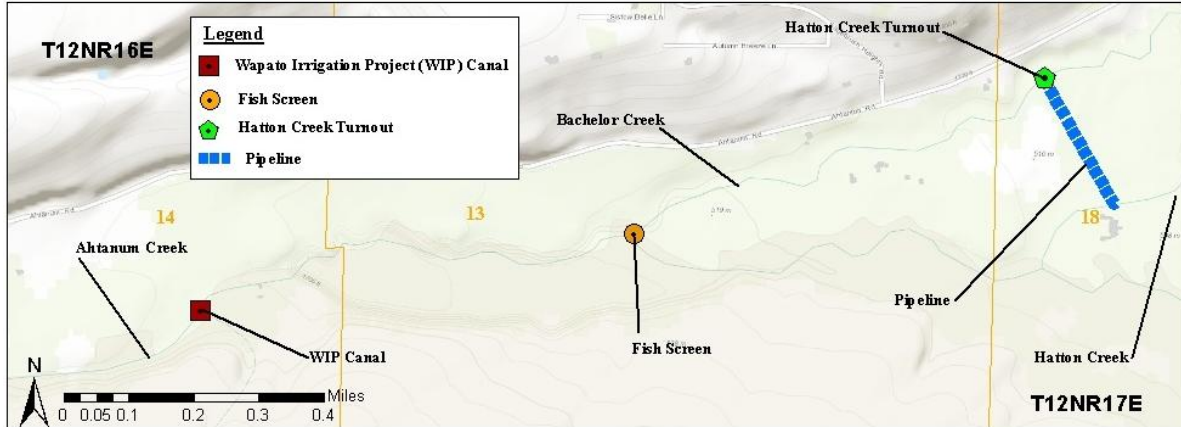
The Ahtanum Creek system is complex. According to the June 2005 Final Programmatic Environmental Impact Statement for the Ahtanum Creek Watershed Restoration Program, the Ahtanum Creek Subbasin can be described as three different reaches. First, the upper reach consists of the North and South Forks of Ahtanum Creek which flow to their confluence near Tampico. The upper reach flows through a combination of managed forest land (North Fork) and tribal land (South Fork). Second, the middle reach begins at the confluence of the North and South Forks and flows to Wiley City. And third, the lower reach starts at Wiley City and flows to confluence with the Yakima River. The majority of irrigation occurs in the middle and lower reaches of the creek, where pasture and hay are the predominant irrigated crops. The middle and lower reaches of Ahtanum Creek are made up of the main channel and two regulated side channels known as Bachelor Creek and Hatton Creek.

Ahtanum Irrigation District

It is important to understand the current relationship between the above mentioned channels in order to make sound determinations on changes in points of diversion in the Ahtanum system. Many of the irrigation water rights confirmed by the Court are diverted from the smaller channels of Bachelor Creek and Hatton Creek. These two creeks have historically been considered side channels of Ahtanum Creek, first originating from Ahtanum Creek, and then later joining back up to the main channel at two different points downstream.

In the early 1990's, Ahtanum Irrigation District (AID) physically combined the origination points of both Bachelor and Hatton Creeks and placed a head gate with a large fish screen just downstream of the location where the channel splits. The fish screen is located approximately 2500 feet east and 2350 feet south of the northwest corner of Section 13, being within the SW¼NW¼ of Section 13, T. 12 N., R. 16 E.W.M. This point is located approximately 3500 feet downstream from the Wapato Irrigation Project (WIP) canal, which is the point of diversion used for the water users on the Yakama Reservation. Once water flows through the fish screen, it continues through a common channel for approximately 3800 feet, where there is a continuous-head orifice turnout, which serves as the origination point of Hatton Creek. This point is located approximately 200 feet east and 1400 feet south from the northwest corner of Section 18, being within the SW¼NW¼ of Section 18, T. 12 N., R. 17 E.W.M. From this point water is diverted through a pipeline, in a southeasterly direction, approximately 700-800 feet under a pasture where it is discharged into the natural flow channel of Hatton Creek.

Figure 1: Fish screen and origination point overview.



Fish passage barriers are located on the lower reaches of Hatton and Bachelor Creeks just upstream from Ahtanum Creek. Although the fish passage barriers exist, Washington State Department of Fish and Wildlife Instream Flow biologist Paul LaRiviere found many fish species present in both Bachelor and Hatton Creeks.

Property owners within the district are the individual water right holders with AID managing the distribution of the water to the individual points of diversion only. AID manages the distribution of water among Bachelor, Hatton, and Ahtanum Creeks at the headgate, regulating the flow among the three creeks. AID also manages the diversions of its patrons along the creeks to ensure the priority system is followed. To do this, AID opens up the common channel for Bachelor and Hatton Creeks and allows approximately 35-40 cfs to flow through the fish screen. When the water reaches the origination point of Hatton Creek, a continuous-head orifice turnout is opened to allow approximately half the total into Hatton Creek; the other half continues to flow down Bachelor Creek. Later in the season the flow in the creeks becomes low, usually before reaching the July 10 cut-off, the stream patrolman for AID begins to regulate based on the priority system established in the *Achepohl* proceeding.

Proposed Use

The applicant proposes to change the point of diversion confirmed by the Court from a point on Hatton Creek in the NE¼ NW¼ of Section 17, T. 12 N., R. 17 E.W.M., to a downstream point on Hatton Creek within the SE¼SE¼ of Section 8, T. 12 N., R. 17 E.W.M. The water supply system consists of a 10 horsepower electric motor on a centrifugal pump, and distributed to the applicant's lands by means of 4-inch diameter PCV pipe.

No other changes are proposed for the subject right.

Other Rights Appurtenant to the Place of Use

There is one groundwater right appurtenant to the place of use for the subject right. Certificate Record No. 4, Page 1625-A, also identified by Ecology Water Right Control No. G4-*02592CWRIS, authorizes withdrawal of 210 gallons per minute; 80 acre-feet per year, for purposes of irrigation 60 acres. The priority date for G4-*02592CWRIS is June 10, 1952.

Notes from the job file state that the water requirement for the water right described above was calculated on each acre for land needing four acre-feet per acre (ac-ft/yr). The water right is considered

“additive” to the applicant’s Class 7 Hatton Creek surface water right, together not to exceed 160 ac-ft/yr to be used during a typical irrigation season (not to exceed the July 10 surface water cutoff date). The place of use of this right is shared among Loren Wiley/CS4-02398CTCL@5, David Carson/CS4-02398CTCL@8, and James Ives/CS4-02398CTCL@2.

Hydrologic/Hydrogeologic Evaluation

For the purpose of this evaluation, the region of interest extends from the Yakama Nation and Ahtanum Irrigation District gauging stations (Figure 2) to the confluence of Ahtanum Creek with the Yakima River. Previous studies (Foxworthy, 1962; Golder, 2004) have established general classifications regarding the losing/gaining tendency for each of the stream reaches in the Ahtanum Creek watershed. Briefly, a losing reach indicates that the stream has a tendency to discharge water to the aquifer over a given reach. A gaining reach occurs when groundwater is adding water to a creek over a specific reach.

The tendency for each reach to lose or gain was determined by quantifying differences in flows between measurement points, after accounting for diversions. The primary measurement points were on Ahtanum Creek at the Yakama Nation Gauge Station, the Ahtanum Irrigation District Gauge Station, Wapato Irrigation Project Diversion, Carson Road, American Fruit Road, and the USGS Gauge at Union Gap (Figure 2). Limited or incomplete data is available for each of these gauges.

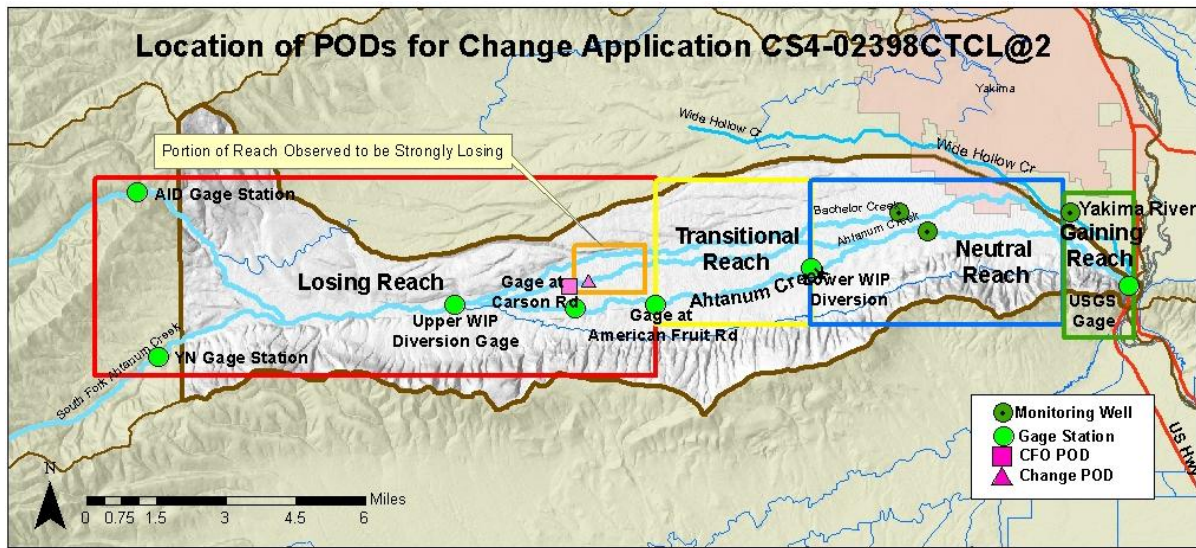
Golder (2004) compiled and compared four years of available data. Golder’s study indicated a consistent losing reach between the North Fork and South Fork gauge stations and American Fruit Road. Between Carson Road and American Fruit Road, a loss of 2 cfs was observed during the summer and fall (Figure 2).

Limited gauge data is available on Bachelor Creek and Hatton Creeks; George Marshall (2015, via personal communication) indicated that the reach between Carson Road and Marks Road on Bachelor Creek and Hatton Creeks took longer to “fill” early in the irrigation season, than other areas in the stream reach (orange box, Figure 1). Based on shared depositional history and geologic environment, the tendency for Bachelor Creek and Hatton Creeks to gain or lose water over a given reach is expected to be similar to Ahtanum Creek.

During the irrigation season, Ahtanum Creek transitions from losing to neutral/gaining, east of Marks Road. Golder (2004) indicated that much of the lower portion of the watershed is a neutral reach, however Foxworthy (1962) suggested that the gaining portion may extend further west. The actual timing and location of the transition from losing to neutral is not fixed. It’s dependent on creek flow (and stage or elevation) relative to the groundwater levels.

In the reach between American Fruit Road Gauge and the lower WIP diversion, Golder (2004) identified measured stream gains in the spring and losses in the summer. The neutral and gaining reaches were not extensively discussed in Golder (2004). However, monitoring well data compiled by Foxworthy (1962) provides information regarding the seasonal depth to groundwater in the alluvial aquifer. Alluvial aquifer wells located in the neutral reach have a hydrograph with a slight seasonal variation. For example, the monitoring wells in the neutral reach (Circle with a dot, Figure 2) had a 2 to 3 feet variation over the year. Groundwater depth ranged from 2.5 to 5 feet below ground surface (bgs). The monitoring well located in the gaining reach (circle with a dot, Figure 2) had a groundwater depth of ~2 feet bgs and +/-1 foot of variation. The similarity between stream and groundwater elevation support the observation that the eastern portion of the watershed is a gaining reach.

Figure 2: Hydrologic properties of Ahtanum Creek stream system, March through July.



Impairment Considerations

A table of intervening water right between the POD confirmed by the Court and the applicant-proposed POD is listed in Table 1 below.

Table 1: Intervening water rights

Water Right Document No.	Application Change No.	Priority Date	Current Source	Proposed Source
S4-85092-J	CS4-02398CTCL@9	June 30, 1866	Hatton Creek and Ahtanum Creek	Hatton Creek
S4-85025-J	CS4-02398CTCL@8	June 30, 1870	Hatton Creek and Bachelor Creek	Hatton Creek
S4-85026-J	NA	June 30, 1870	Hatton Creek and Bachelor Creek	NA
S4-85033-J	NA	June 30, 1870	Hatton Creek	NA
S4-85039-J	NA	June 30, 1870	Hatton Creek and Bachelor Creek	NA
S4-85060-J	CS4-02398CTCL@5	June 30, 1870	Hatton Creek and Bachelor Creek	NA
S4-85061-J	NA	June 30, 1870	Hatton Creek and Bachelor Creek	NA
S4-85064-J	NA	June 30, 1870	Hatton Creek and Bachelor Creek	NA
S4-85066-J	NA	June 30, 1870	Hatton Creek and Bachelor Creek	NA
S4-85093-J	CS4-02398CTCL@9	June 30, 1870	Hatton Creek and Ahtanum Creek	Hatton Creek

Water Right Document No.	Application Change No.	Priority Date	Current Source	Proposed Source
S4-84969-J	NA	June 30, 1871	Hatton Creek	NA
S4-84976-J	NA	June 30, 1871	Hatton Creek	NA
S4-84986-J	NA	June 30, 1871	Hatton Creek	NA
S4-85013-J	NA	June 30, 1871	Hatton Creek	NA
S4-85021-J	NA	June 30, 1871	Hatton Creek	NA
S4-84858-J	CS4-02398CTCL@1	June 30, 1882	Hatton Creek	Hatton Creek
S4-85161-J	NA	June 30, 1882	Hatton Creek	NA
S4-84821-J	CS4-02398CTCL@21	June 30, 1888	Hatton Creek and Ahtanum Creek	Ahtanum Creek
S4-84826-J	NA	June 30, 1888	Hatton Creek and Ahtanum Creek	NA
S4-84828-J	CS4-02398CTCL@25	June 30, 1888	Hatton Creek and Ahtanum Creek	Ahtanum Creek
S4-84829-J	NA	June 30, 1888	Hatton Creek and Ahtanum Creek	NA
S4-84817-J	NA	June 30, 1891	Hatton Creek and Ahtanum Creek	NA
S4-84818-J	NA	June 30, 1891	Hatton Creek and Ahtanum Creek	NA
S4-84819-J	NA	June 30, 1891	Hatton Creek and Ahtanum Creek	NA
G4-GWC03295-A(A)	NA	October 26, 1948	Groundwater	NA
G4-GWC03295-A(B)	NA	October 26, 1948	Groundwater	NA

Hatton Creek is characterized as a losing stream within the reach between the authorized and proposed points of diversion. Therefore, there may be less water available at the proposed POD than there was at the authorized POD. Senior rights on Hatton Creek could still call on this user. Since this water right is also relatively senior to other junior rights within this losing reach, unconditionally authorizing a move downstream would lead to a call on junior users on a more frequent basis than would have been the case if the POD remained at the authorized location.

The water right associated with this change application is relatively senior to water rights located above the CFO-authorized POD on Hatton Creek. If there is less water available at the new POD, authorizing a move downstream may lead to a call on upstream junior users on a more frequent basis than would have been the case if the POD remained at the CFO-authorized location.

In order to assure that junior users are not adversely impacted by both elements of the proposed change outlined above, this water right change application will be provisioned with the stipulation that the water-right holder may only call on junior water rights when water is available at the CFO-authorized POD.

Approval of this change request under Application for Change No. CS4-02398CTCL@2 will not cause impairment of existing rights.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a change in point of diversion be approved in the amounts and within the limitations listed below and subject to the provisions listed above.

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

Qi:
0.10 cfs

Qa:
.2 acre-feet per year

Purpose and Period of Use:
Irrigation of 10 acres from April 15 through July 10.

Point of Diversion:
SE¼, SE¼, Section 8, Township 12 North, Range 17 E.W.M. (Parcel # 171208-44002).

Place of Use:
W½SE¼SE¼ of Section 8, T. 12 N., R. 17 E.W.M. (Parcel # 171208-44002). Answer No. 172.

Limitations of Use:

- 1) When water is available in excess of that needed to satisfy all confirmed water rights both on and off the Yakama Reservation and any water needed to satisfy the Yakama Nation's minimum instream flow right for fish and other aquatic life, an additional 0.10 cfs, 5.94 acre-feet per year can be diverted.
- 2) This appropriation may only call on junior water rights when water is available at the CFO-authorized POD.

Tyler Roberts, Permit Writer

Date

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REFERENCES

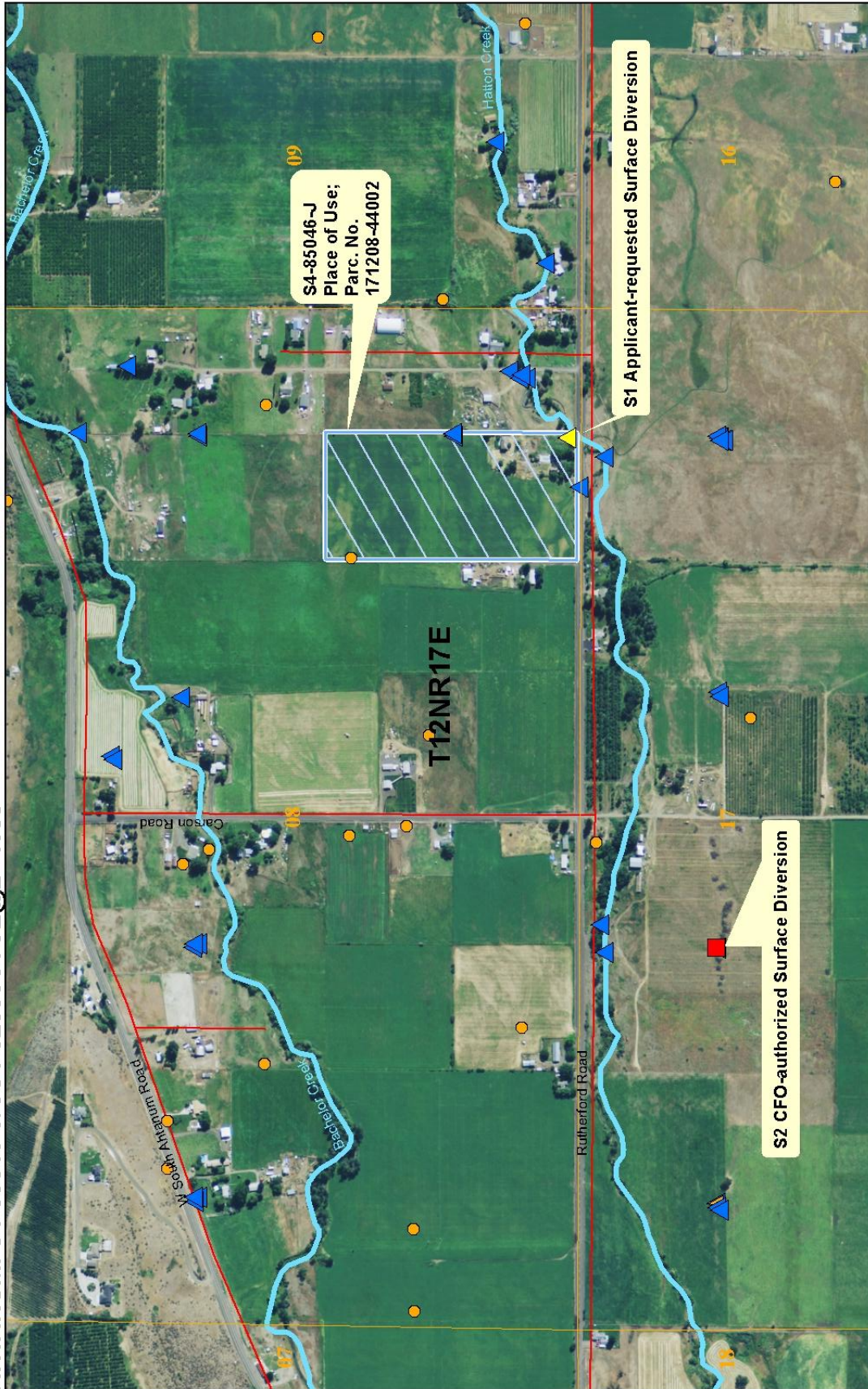
Foxworthy, B., 1962, "Geology and ground-water resources of the Ahtanum Valley, Yakima County, Washington." USGS Water Supply Paper 1598, 108 p.

Golder and Associates, Fitch and Marshall Inc., 2004, "Ahtanum Creek Watershed Assessment." Redmond, WA, 587 p.

DRAFT

ATTACHEMENT 1
Overview map of requested change.

AHTANUM: S4-85046-J/CS4-02398CTCL@2 - Ives



Legend

- | | |
|--|---------------------------------------|
| | Place of use |
| | Townships |
| | Sections |
| | Applicant-requested Surface Diversion |
| | CFO-authorized Surface Diversion |
| | Other Surface Diversion |
| | Well |



Map Date: 1/30/2015

ATTACHEMENT 2a

Irrigation works taken on October 22, 2014 site visit.



ATTACHEMENT 2b

Irrigation works taken on October 22, 2014 site visit.



ATTACHEMENT 2c

Irrigation works taken on October 22, 2014 site visit.

